



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/682,540

09/17/2001

Mats Danielsson

GPD0021-US

5619

28694

7590

09/21/2005

NOVAK DRUCE & QUIGG, LLP
1300 EYE STREET NW
SUITE 400 EAST TOWER
WASHINGTON, DC 20005

EXAMINER

SONG, HOON K

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/682,540	Applicant(s) DANIELSSON, MATS	
	Examiner Hoon Song	Art Unit 2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16, 17 and 23-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16, 17, 40 and 41 is/are rejected.
- 7) ☒ Claim(s) 23-39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

The indicated allowability of claims 16-17 and 40-41 is withdrawn in view of the newly discovered reference(s) to Wang (US 4953189). Rejections based on the newly cited reference(s) follow.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "means for moving an object to be examined" as claimed in claim 16 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "means for moving an object to be examined" is not described in the specification. In light of the drawings and the specification, "means for moving an object to be examined" is considered --means for moving a beam directing member relative to an object to be examined--.

Claim Objections

Claims 16 and 17 are objected to because of the following informalities:

In claim 16 at line 8-10, "said array of detectors comprises detector arrangement substantially in parallel, consisting of at least one carrying member with detectors comprising a plurality" is awkward and should be rephrased. It is unclear that is included in the detector array.

In claim 17 at line 22, "is determined" should read --are determined--.

Claims 23, 28 and 36 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. the claims 23, 28 and 36 fails to further limit the subject matter of independent claim 17 by claiming redundant claim limitations.

In claim 23 at line 3, a carrying member" is redundant and should read --said carrying member--; "a plurality of sensor" is redundant and should read --said plurality of sensor--; at line 3-6, "carrying member" and "the detector arrangement" are redundant and should be removed.

There are numerous informalities exist throughout the claims. Appropriate revision/correction for all claim is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-17 and 40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang (US 4953189).

Regarding claims 16-17 and 40-41, Wang teaches a method for scanning in an x-ray apparatus comprising:

An essentially planar (20) member of a material non-transparent to x-rays, having an elongated slot (22) formed therein to provide a collimator for x-rays.

An array of detectors (26) provided in communication with said slot and arranged to detect x-rays and for providing a signal representing the intensity of said x-ray imaging thereon (figure 1),

Means for moving (34) a beam directing member relative to an object to be examined,

Wherein said array of detectors comprises detector arrangement arranged substantially in parallel, consisting of carrying member with detectors comprising a plurality of sensors provided on a substrate and wherein said detectors are arranged substantially edge to edge and side by side on at least one side of said at least one carrying member (figure 1, the detector element 28 is considered to be disposed on a substrate),

Wherein the method comprises the steps of:

Starting a scan from a first position and said collimator and said detectors having a first speed (a motor 34 is considered to move at initial acceleration speed, column 8 line 44-63),

Bring said collimator and said detectors to a maximum, substantially constant speed where all of said collimator and said detectors are in a field of view (the motor 34 is considered to move at a normal scanning speed, column 8 line 44-63),

Stopping said scan when said collimator is outside said field of view (the motor 34 is considered to move at stopping deceleration speed, column 8 line 44-63).

Wherein an acceleration time before said scan reaches a maximum speed and a deceleration time before said scan stops are determined in such a way that parts of an image, where the acceleration and deceleration take place, obtain substantially same photon statistics as the rest of said image (column 8 line 44-63).

Allowable Subject Matter

Claims 23-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 23-39, the prior art fails to teach said detectors comprising a sensor plane being substantially parallel to a surface of said carrying member and said carrying member being arranged so that said sensor plane is angularly oriented otherwise than perpendicular to incident x-ray beams and wherein at least two detectors are arranged in at least two levels, said levels being displaced relative one to another such that an inactive section of at least one detector is overlapped with an active section of said other detector as claimed in claim 23.

Response to Arguments

Applicant's arguments with respect to claims 16-17 and 40-41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoon Song whose telephone number is (571) 272-2494. The examiner can normally be reached on 8:30 AM - 5 PM, Monday - Friday.

Art Unit: 2882

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on (571) 272 - 2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HKS

9118105
HKS



DAVID V. BRUCE
PRIMARY EXAMINER